



**City of Monroe  
Water Resources  
Source Water Supply Study**

**Request for Qualifications (RFQ)**  
**January 6, 2026**

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## 1. Project Purpose & Objectives

The City of Monroe is soliciting Statements of Qualifications from experienced engineering firms to perform a comprehensive Source Water Supply Study to evaluate the capacity, reliability, resilience, regulatory feasibility, and long-term sustainability of the City's existing water supply assets and to identify and assess potential supplemental or alternative raw water sources capable of meeting current and projected demands.

The Study shall support data-driven decision-making and provide the City with a defensible technical basis for near-, mid-, and long-term water supply planning under normal, drought, and emergency operating conditions.

## 2. Existing Water Supply System Overview

The City's current surface water supply system includes:

- Lake Monroe: An impounded source with a dam that can release water downstream.
- Lake Lee: Receives flow from Lake Monroe via Little Richardson Creek and includes a pump station conveying water to Lake Twitty.
- Lake Twitty: The City's primary raw water reservoir and location of the raw water intake supplying the John Glenn Treatment Plant.

In addition, the City owns a rock quarry reservoir that has been previously authorized for use as an emergency raw water supply by NCDEQ. The Rock Quarry currently does not have permanent infrastructure connecting it to the City's other water supply assets.

## 3. General Study Requirements

The Consultant shall:

- Evaluate existing water supply assets, operational interconnections, and constraints.
- Identify and evaluate potential supplemental or alternative raw water sources, including surface water, interconnections, or other viable supply strategies.
- Evaluate technical feasibility, regulatory requirements, permitting pathways, environmental considerations, infrastructure needs, costs, risks, and implementation timelines for each option.
- Avoid predetermining preferred outcomes; the Study shall remain option-neutral and technically defensible.
- Clearly distinguish between near-term, intermediate, and long-term supply strategies.

#### 4. Detailed Scope of Services

##### **Task 1 Data Collection and System Characterization**

The Consultant shall collect, review, and validate available data, including but not limited to:

- Historical and current water demand, production, and system capacity data.
- Raw water intake capacities and operational constraints.
- Reservoir storage volumes, stage-storage relationships, and yield characteristics.
  - May require bathymetric surveying.
- Hydrologic and climatic data.
- Existing permits, approvals, and regulatory constraints.
- Operational rules and interdependencies among Lake Monroe, Lake Lee, and Lake Twitty.

Deliverable: A baseline technical memorandum summarizing existing system conditions, constraints, and data gaps.

##### **Task 2 Existing Source Yield and Reliability Analysis**

The Consultant shall evaluate the safe yield, firm yield, and operational reliability of the City's existing water supply system under:

- Average hydrologic conditions.
- Seasonal variability.
- Extended drought scenarios.
- Emergency and contingency operations.
- Anticipated growth.

Analysis shall explicitly consider:

- Inter-reservoir transfers and pumping dependencies.
- Storage limitations and refill recovery time.
- Operational vulnerabilities affecting treatment plant supply reliability.

Deliverable: A quantitative yield and reliability assessment of existing sources.

### **Task 3 Evaluation of Rock Quarry Reservoir**

The Consultant shall evaluate the technical feasibility of the rock quarry reservoirs as a potential water supply source, without presupposing its role as either emergency-only or long-term supply.

This evaluation shall include:

- Available storage volume and usable yield.
- Chemical analysis of water supply feasibility.
- Hydraulic feasibility of conveying water to existing system assets.
- Infrastructure requirements (intake structures, pumping, pipelines, power, controls).
- Regulatory and permitting considerations.
- Operational integration with existing facilities.
- Planning-level cost estimates and implementation timelines.

Deliverable: A standalone feasibility evaluation of the quarry as a supply option.

### **Task 4 Identification and Screening of Alternative or Supplemental Water Supply Options**

The Consultant shall identify and screen all reasonable alternative or supplemental raw water supply options, which may include, but are not limited to:

- Additional surface water sources.
- Interconnections with neighboring utilities.
- Regional water supply arrangements.
- Inter-basin transfer scenarios.
- Other feasible raw water acquisition strategies.

For each option, the Consultant shall evaluate:

- Technical feasibility.
- Regulatory and permitting requirements.
- Environmental considerations.
- Infrastructure needs.
- Planning-level costs.
- Risks, uncertainties, and dependencies.

The Study shall not presume the availability or feasibility of any inter-basin transfer and shall present such options objectively and analytically.

Specific supplemental and alternative water supply options shall first be approved by the City of Monroe prior to commencement of this task.

Deliverable: A screening matrix summarizing advantages, limitations, risks, and feasibility of each option.

### **Task 5 Regulatory and Permitting Pathway Assessment**

For each viable supply option, the Consultant shall identify:

- Required local, state, and federal permits and approvals.
- Anticipated review timelines.
- Regulatory risks and potential constraints.
- Key decision points affecting feasibility.

Deliverable: A regulatory roadmap for each viable alternative.

### **Task 6 Comparative Evaluation and Risk Analysis**

The Consultant shall perform a comparative evaluation of all viable supply options using criteria including:

- Supply reliability and resilience.
- Regulatory feasibility.
- Capital and operating cost implications.
- Implementation timeframe.
- Operational complexity.
- Long-term sustainability and adaptability.

The analysis shall include a risk-based assessment highlighting uncertainties, sensitivities, and decision drivers.

Deliverable: A comparative evaluation matrix and narrative risk assessment.

### **Task 7 Phased Implementation Strategy**

The Consultant shall develop a phased water supply strategy identifying:

- Short-term actions (0-5 years).
- Mid-term actions (5-15 years).
- Long-term actions (15+ years).

The strategy shall clearly identify trigger points tied to demand growth, drought severity, regulatory thresholds, or system performance.

Deliverable: A phased implementation roadmap with decision milestones.

### **Task 8 Final Report and Executive Summary**

The Consultant shall prepare:

- A comprehensive Source Water Supply Study Report.
- A concise Executive Summary suitable for City leadership and elected officials.
- Supporting figures, tables, and appendices.
- Assist with Presentation to City Council.

#### **5. Submittal Requirements**

Submittals shall be three (3) hard copies delivered by mail and an electronic .pdf of the qualifications and proposal.

Submittals are encouraged to be concise, well-organized, and limited to the information requested herein.

Submittals are to be sent to:

City of Monroe – Water Resources  
Attn: Jay Voyles  
2201 Walkup Ave.  
Monroe, NC 28110

**Submittals Due: 2/16/2026 by 2:00 PM EST**

#### **Qualifications to be submitted:**

- Include the following information about your firm:
  - Name and Address
  - Physical location of personnel proposed to work on this project
  - Number of employees
  - Description of the firm's core services related to source water supply planning.
- Demonstrated firm experience in:
  - Multi-reservoir surface water systems with operational or hydraulic interdependencies.
  - Surface water yield, firm yield, and drought resilience analysis.
  - Evaluation of supplemental or alternative surface or ground water sources at a planning level.

- North Carolina and Federal regulatory coordination related to surface water supply planning.
- List of similar projects
- Resumes of key personnel proposed to work on this project.
- List of any proposed subcontractors.
- List of at least three (3) client reference for related projects with contact name, telephone number, and email address.
- Any additional information in support of our project and your services.
- A statement in which applicant certifies that the information provided is correct, under the penalties of perjury.

**Proposals to be submitted:**

Proposals must include services for the entire Project Scope (Section 4), plus any additional recommended services.

**Project Schedule to be submitted:**

Each firm will be required to submit a schedule for the project that details the milestones of the project.

**6. Project Timeline**

RFQ Timeline:

Advertise RFQ	1/06/2026
Appendices available electronically	1/12/2026
Deadline RFQ questions	1/19/2026
Send questions/answers to interested firms	1/23/2026
Deadline for qualifications submittal	2/16/2026, 2:00pm EST
Review qualifications	2/17/2026 – 2/24/2026
Anticipated to select qualified firm	2/27/2026
Anticipated to contract with qualified firm	3/11/2026

Project Timeline:

The City anticipates that the Source Water Supply Study will require approximately 10 months to complete. The actual schedule will be refined during contract negotiations and could vary based on data development and level of analysis required, commensurate with the complexity of the Scope of Services.

**7. Questions, Clarifications, and Notification**

All interested responders may notify the City of Monroe Water Resources by email to [jvoyles@monroenc.org](mailto:jvoyles@monroenc.org) due 1/19/2026. The interested firms will be sent the RFQ appendices electronically and receive responses to any and all

questions or clarifications received. The appendices will be available electronically on 1/12/2026.

Questions and clarifications are to be submitted in an email to [jvoyles@monroenc.org](mailto:jvoyles@monroenc.org) by 1/19/2026. The City of Monroe will respond via email on 1/23/2026. The responses to questions and clarifications will be sent to all interested responders to the RFQ.

## **8. Contact Information**

Jay Voyles

Deputy General Manager of Energy Services & Water Resources

980-315-6437

[jvoyles@monroenc.org](mailto:jvoyles@monroenc.org)

## **9. RFQ Evaluation Criteria**

The City of Monroe will evaluate and select the firm based upon the responses submitted to this request. The City of Monroe reserves the right to seek additional information.

Qualifications will be evaluated and considered as follows:

Firm overall experience	25 points
Project Team Qualifications/Experience	15 points
Understanding & Technical Approach to Supply Analyses	20 points
Relevant Regulatory & Permitting Experience	10 points
Past Performance & References	10 points
Similar Projects	15 points
Proposal	5 points

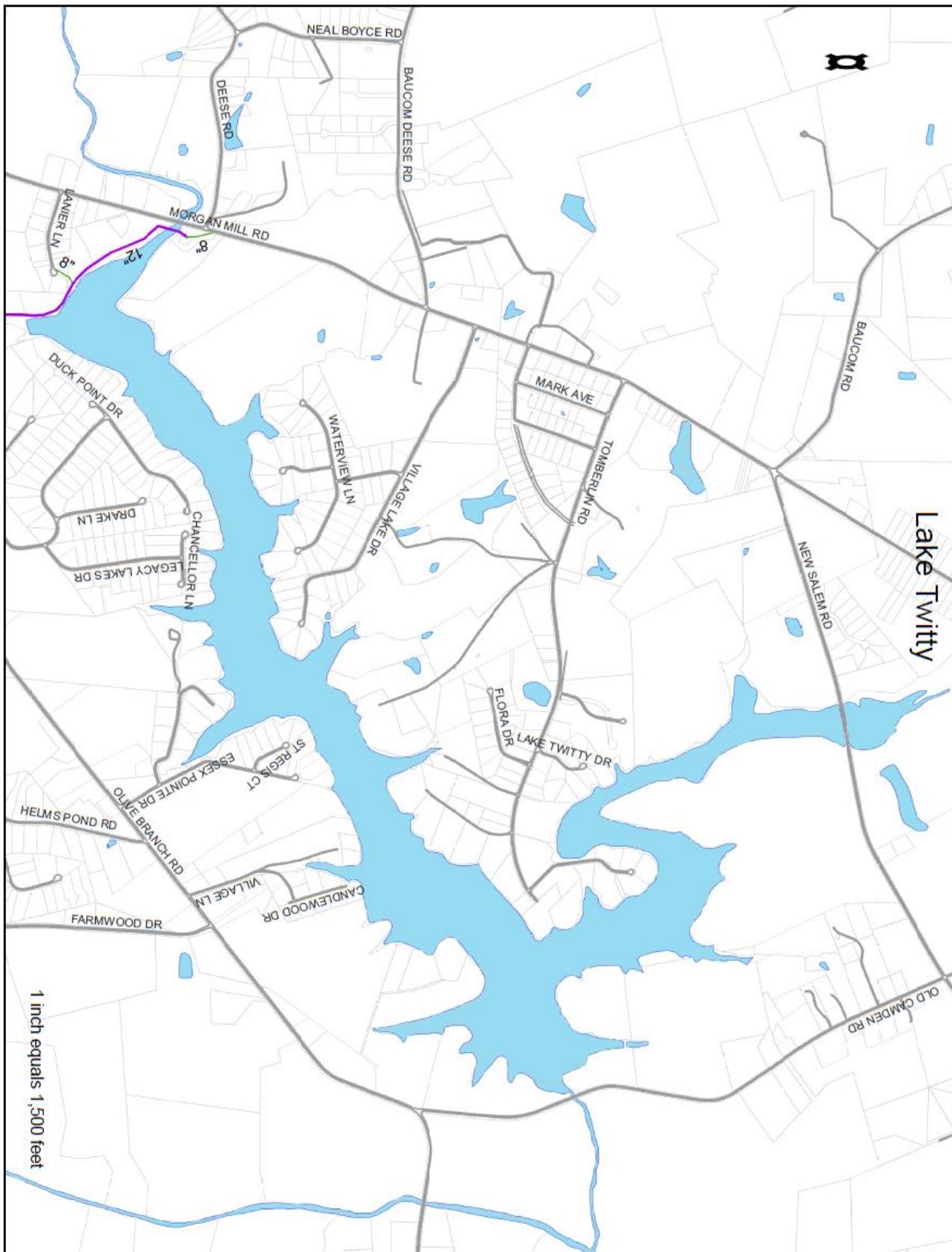
## **10. Selection Process**

The City of Monroe will evaluate and select the firm based upon the responses submitted to this request. The City of Monroe reserves the right to seek additional information. The City of Monroe reserves the right to not select a firm from the submittal.

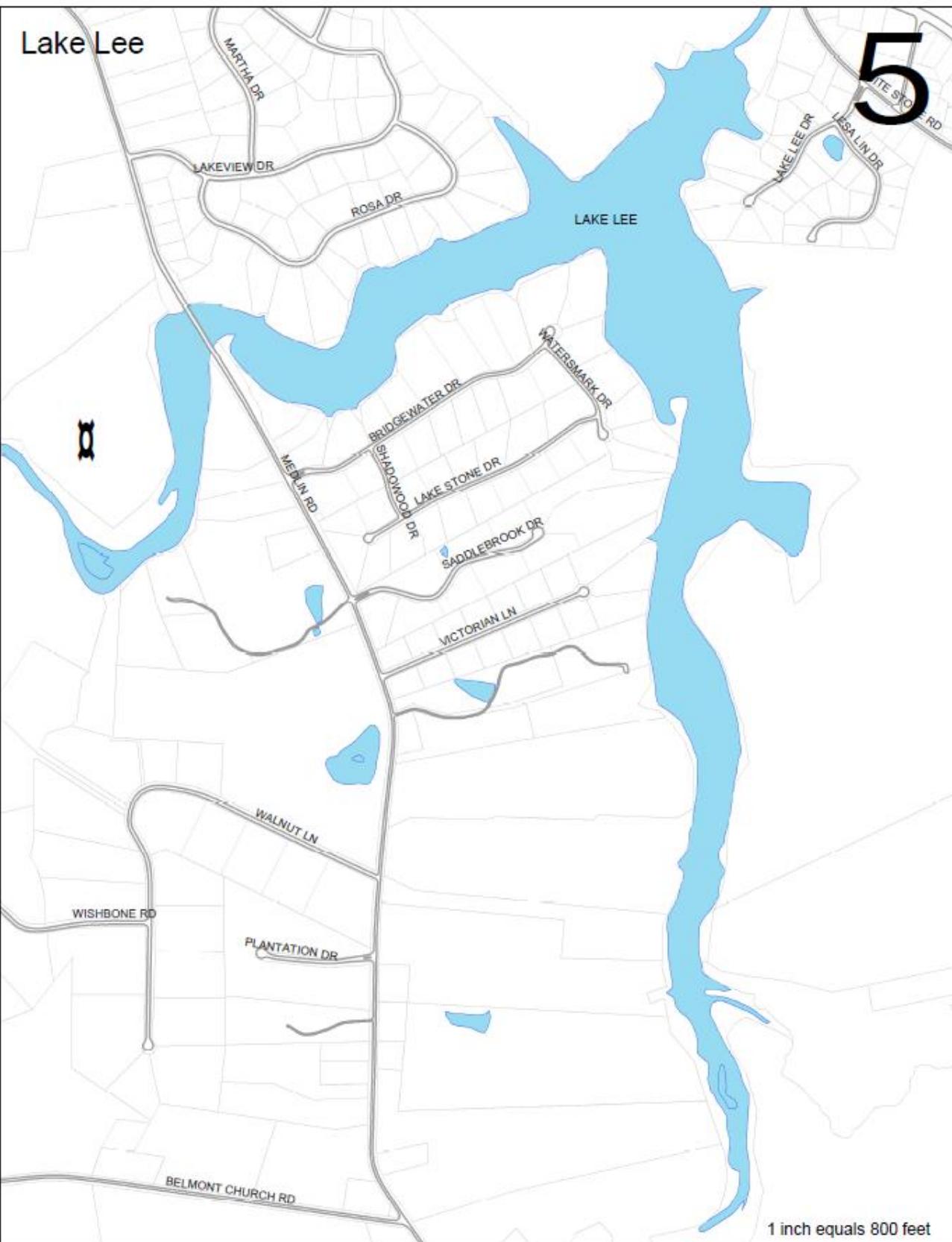
11. Appendices

Appendices not attached to this Request for Qualifications will be available on 1/12/2026 and can be requested for electronic download.

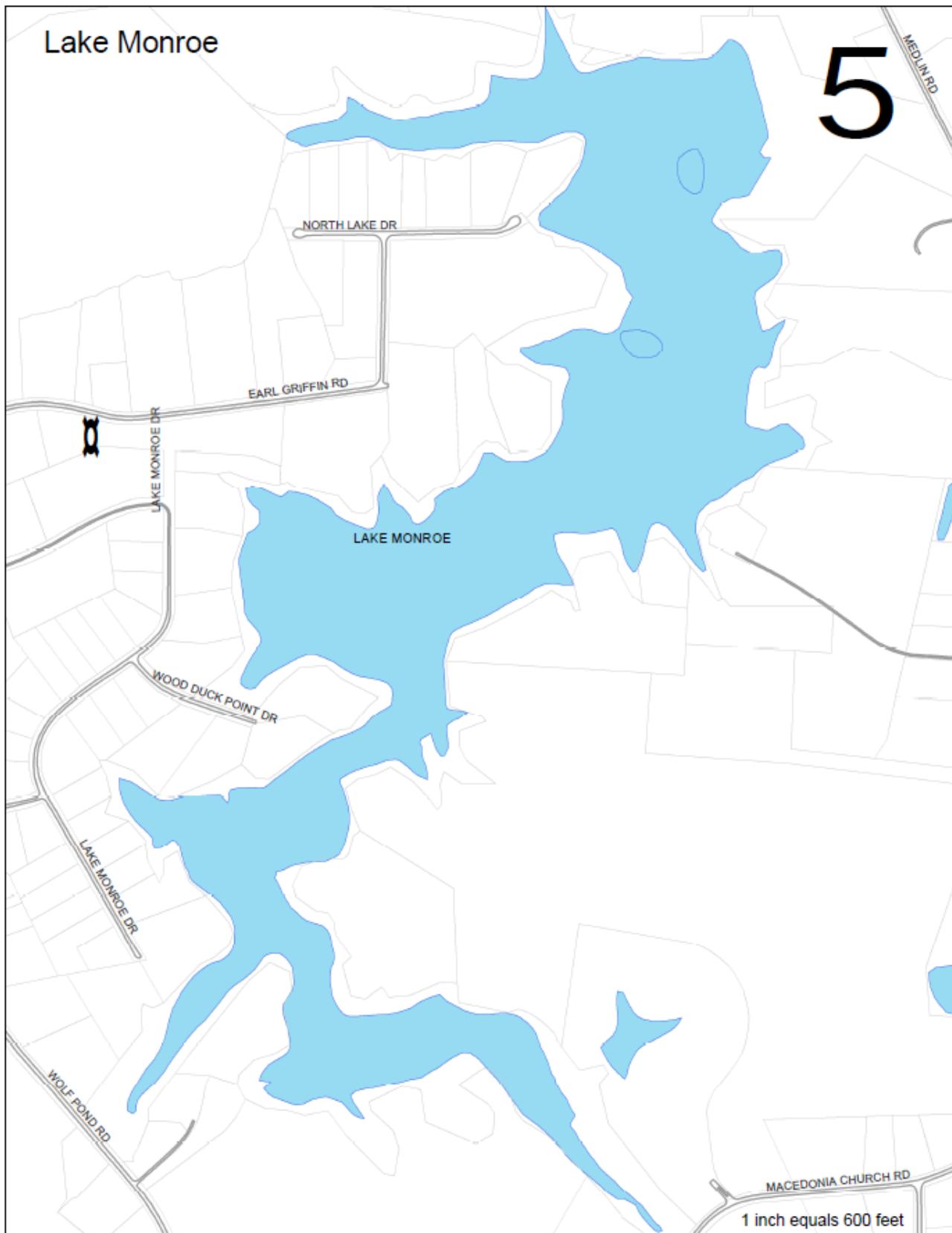
## Appendix I



Appendix II



Appendix III



## Appendix IV

Appendices available for electronic download upon request, available January 12<sup>th</sup>, 2026:

- 2023 Local Water Supply Plan
- Application for Approval of Engineering Plans & Specifications- Emergency Water Supply, Monroe Rock Quarry
- Monroe Rock Quarry Survey
- Water System Maps with Pressure Zones
- Lake Lee Pump Station Replacement As-Builts
- Monroe-Union County Water Supply Agreement
- Union County IBT Certificate
- Dam Inspection Reports